Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's Space Station Licensing Rules and Policies	)	IB Docket No. 02-34
	)	
2000 Biennial Regulatory Review -- Streamlining and Other Revisions of Part 25 of the Commission's Rules Governing the Licensing of, and Spectrum Usage by, Satellite Network Earth Stations and Space Stations	)	IB Docket No. 00-248

NOTICE OF PROPOSED RULEMAKING AND FIRST REPORT AND ORDER

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I. INTRODUCTION

1. In this Notice of Proposed Rulemaking (*Notice*), we invite comment on revisions to the licensing process for orbital locations or spectrum used for the provision of international or global satellite communications services in an effort to develop a record that will aid us in fashioning rules to streamline that process.[1] In turn, we expect that the adoption of appropriate rules would facilitate innovation, significantly reduce administrative burdens on applicants, and expedite the provision of beneficial services to the public, including new services to rural and unserved areas. In this First Report and Order, we adopt rules allowing us to issue satellite and earth station licenses with 15-year license terms, rather than the current 10-year terms.

II. BACKGROUND

A. Satellite Industry

2. The satellite industry is a crucial component of the global communications marketplace. For example, satellite technology facilitates provision of Internet services, and it likely will continue to play an increasingly important role in this area. Satellite facilities also constitute a major component of the wireless backbone infrastructure for voice and data communications, and provide an important opportunity to create another competitive platform for delivery of broadband services. Satellite facilities are especially well suited for extending these services to rural and unserved areas.[2] Similarly, satellites are key to wide-area distribution of the video signals of over-the-air broadcasts and cable systems to other satellite systems and directly to consumers. Satellite systems have also recently been used to provide data and voice services to mobile and handheld portable devices.

3. There are now well over 200 U.S.-licensed commercial satellites in operation. The United States has licensed more commercial satellites than any other administration. The success of the U.S. satellite industry is due, at least in part, to the Commission's current satellite licensing process, developed in the early 1980s.[3] That process allows operators the flexibility to design

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[1] Under the Communications Act, a license must be issued by the Commission before a satellite can be operated. 47 U.S.C. § 301.

[2] *See* FWCC Request for Declaratory Ruling on Partial-Band Licensing of Earth Stations in the Fixed-Satellite Service that Share Terrestrial Spectrum, *First Report and Order*, IB Docket No. 00-203, 16 FCC Rcd 11511 (2001) (*FWCC/Onsat First Report and Order*).

[3] The Commission first published rules governing the licensing of satellite services in the early 1970s. *See* Establishment of Domestic Communications-Satellite Facilities by Non-Governmental Entities, *First Report and Order*, 22 FCC 2d 86 (1970); *Second Report and Order*, 35 FCC 2d 844 (1972); *modified*, 38 FCC 2d 665 (1972). *See also* Western Union Telegraph Company, 38 FCC 2d 1197 (1973); Comsat General Corporation, 42 FCC 2d 677 (1973) (examples of satellite licenses issued under these procedures). At the time the Commission's initial licensing rules were in effect, assuming that an entity met the Commission's financial and other licensing requirements, it could be reasonably assured that it would receive a license. This amounted to a de facto first-come, first-serve licensing approach because there

competitive systems, while promoting multiple entry. Although the Commission's licensing process was successful in the past, we believe that it needs improvement to remain successful in the future. Among other things, we need to expedite our satellite licensing process to help ensure that the United States will continue to meet its International Telecommunication Union (ITU) treaty obligations. We also expect that expediting the satellite licensing process will enable us to reduce the number of satellite applications pending before the Commission more rapidly than might be possible under our current procedure.

4. Below, we describe the current licensing process, and then explain our reasons for considering revising it. Subsequently, in Section III., we seek comment on two proposals for revising our satellite licensing procedures: a "first-come, first-served" alternative to processing rounds, and a proposal to modify and streamline the current process. In Sections IV. and V., we invite comment on other ways to improve the satellite licensing process which would be consistent with either of the options discussed in Section III. Finally, in Section VI., we revise Part 25 to allow 15-year license terms for space station and earth station licenses.

B. Current Licensing Procedure

5. Currently, we issue satellite licenses pursuant to "processing rounds," a procedure by which we combine into groups and process together mutually exclusive applications to operate satellites in a particular frequency band. The processing round licensing procedures involve multiple, often quite intricate and time-consuming steps.[4]

6. The typical process is as follows: First, a lead application for a particular service in a specific band is filed. A lead application can be filed at any time. We do not establish specific time periods during which satellite license applicants are required to file lead applications. After initial staff review determines that the application is acceptable for filing, we issue a public notice setting a deadline for petitions to deny to be filed against the lead applicant. A deadline for reply comments also is established. As a further matter, we announce a "cut-off" date, a deadline for other interested parties to file any additional mutually exclusive applications to be considered, along with the lead application, as part of a group.[5] Next, we afford an opportunity for petitions to deny and replies to be submitted with regard to all applications filed subsequent to the lead application.

7. If service rules are needed, the Commission initiates and completes a notice-and-comment rulemaking proceeding to adopt rules that take into account the state-of-the-art of technology and innovation displayed in the applications. Once the service rules are adopted, all of the satellite applicants are afforded an opportunity to amend their applications to conform to

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seemed to be adequate spectrum and orbital slots available to meet all desired service needs. Later, it became apparent that there might not be adequate spectrum or orbital slots available for all desired satellite uses. In response, the Commission revised its satellite license processing rules to adopt the processing round procedure that is generally followed today. *See, e.g.*, Filing of Applications for New Space Stations in the Domestic Fixed Satellite Service, *Memorandum Opinion and Order*, 93 FCC 2d 1260 (1983) (*1983 Cut-Off Order*).

[4] The exceptions to this general procedure are licenses for Direct Broadcast Satellite (DBS) and Digital Audio Radio Satellite (DARS) licenses, which have been issued pursuant to another procedure. This proceeding does not address the DBS or DARS licensing procedures.

[5] *See, e.g., 1983 Cut-Off Order*, 93 FCC 2d 1260.

the new service rules. The amended applications are placed on public notice, and the comments and replies filed regarding those amendments are considered. We subsequently act on the applications.

8. Furthermore, applications that raise potential national security issues or which impact Government-used frequency bands can also cause further delay because of the need for interagency coordination. In some of those cases, the coordination process is not completed within the 30-day comment period. Sometimes, the interagency coordination process takes 120 days or more from the filing of the application. Although this occurs more often in transfer of control proceedings than in new satellite license applications, it is still a potential cause of delay in processing satellite license applications. This could become more of an issue in the future as a result of our adoption of a framework to permit non-U.S.-licensed satellites to access the U.S. market, consistent with U.S. commitments to the World Trade Organization (WTO).[6]

9. The process can take longer when no frequency bands have been allocated domestically or internationally for a proposed service. In cases where no international allocation exists, after technical review of proposed service requirements but before any service rule proceeding is initiated, the United States must develop and submit proposals and negotiate with as many as 189 member states at International Telecommunication Union (ITU) World Radio Conferences (WRCs) to have a WRC adopt an international frequency allocation for the service. WRCs are held approximately every two or three years. As a result, the domestic and international frequency band allocation process can delay a satellite license grant by three years or more, depending on whether such an allocation can be considered on the next WRC agenda. In these situations, the initial application(s) remain in a pending status and the processing round procedures described above are delayed until the frequency bands have been allocated internationally and the Commission has amended its domestic Table of Frequency Allocations[7] to establish a domestic allocation for the service. In those cases, we continue to review the satellite applications under the license procedures described above, to the extent possible. However, we can make only limited progress in our licensing process until the international and domestic frequency allocation processes are completed. Thus, the allocation process can extend substantially the time needed to issue satellite licenses.

10. After the procedures noted above are completed, we determine the qualifications of the applicants. Applications lacking the requisite qualifications specified in the Communications Act and the Commission's rules are dismissed. If there are enough orbital locations and/or there is sufficient spectrum available to accommodate all of the remaining applicants' proposed satellite systems, we issue licenses at that point. If, as is often the case, there are not enough orbital locations and/or there is not sufficient spectrum available to accommodate all the qualified applicants, we afford the applicants an opportunity to negotiate "mutually agreeable" compromises so that all the applications can be granted. Those negotiations can require several months or even years of effort. On occasion, applicants have not been able to reach mutually

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[6] We adopted this framework in *DISCO II*. *See* Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Satellites Providing Domestic and International Service in the United States, *Report and Order*, IB Docket No. 96-111, 12 FCC Rcd 24094 (1997) (*DISCO II*), *recon.* 15 FCC Rcd 7207 (1999) (*DISCO II First Reconsideration Order*), *recon. denied* 16 FCC Rcd 19794 (2001) (*DISCO II Second Reconsideration Order*). For a detailed summary of the *DISCO II* framework, we refer the reader to *DISCO II First Reconsideration Order*, 15 FCC Rcd at 7209-10 (paras. 4-5).

[7] 47 C.F.R. § 2.106.

agreeable compromises, and the Commission has had to mandate a solution using information available on the progress of the negotiations between the parties.[8]

C. Need for Change

11. Under our current procedure, it can take several years to issue satellite licenses. For several reasons, we would like to explore ways to expedite this procedure. First, delays in issuing licenses impose economic costs on society. Second, the current procedure, developed in the early 1980s, is not well suited to the technologically advanced, new satellite services of today. Third, revisions in ITU procedures have heightened the need for a faster licensing procedure. Fourth, good spectrum policy demands completion of licensing as rapidly as possible, in order to expedite the use of scarce spectrum resources by licensees or the reassignment of spectrum returned to or reclaimed by the Commission. Fifth, the Commission is committed to improving its procedures whenever possible to further the public interest. We discuss each of these factors in detail below.

1. Economic Costs

12. The current procedure has at times resulted in long delays in licensing new satellite systems. For example, in the second processing round for low earth orbit (little LEO) applicants, the first application was filed in 1993. However, licenses were not issued until five years later in 1998.[9] With respect to big LEO licenses, the applications were filed in 1997. Yet, it was not until four years later in 2001 that licenses were issued.[10] Some of the delay is necessary to effectuate our cut-off filing procedures in each case. In other cases, delay is the result of the length of time applicants devote to trying to reach mutually agreeable solutions. Other sources of delay are based on international allocation factors. Delays of this kind can result in a significant reduction in the value of those systems. As a consequence of the delays in the current licensing system, potential satellite customers are denied a service they might choose to purchase, and companies wishing to provide satellite services are denied the ability to earn revenues and profits from the sale of their services. The lack of this service imposes real costs on both consumers and suppliers of the service. Economists consider the "consumer surplus" and the "producer surplus" from the provision of goods and services. Consumer surplus is a measure of the value received by consumers beyond what they pay to purchase those goods and services, and producer surplus is a measure of the revenues producers receive beyond the costs of providing a service.[11]

13. Consider a satellite system that will generate future benefits including both profits and consumer benefits greater than the cost of those services to the consumer. Generally, there will be significant costs in the development of the satellite system and there will be some delay in the realization of benefits associated with that satellite system. If there is a delay in licensing a

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[8] *See* The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, *Report and Order*, IB Docket No. 99-81, 15 FCC Rcd 16127 (2000) (*2 GHz Order*).

[9] *See* Final Analysis Communication Services, Inc., *Order and Authorization*, 13 FCC Rcd 6618, 6619-20 (para. 3) (Int'l Bur. 1998).

[10] *See* The Boeing Company, *Order and Authorization*, 16 FCC Rcd 13691 (Int'l Bur. 2001).

[11] Dennis W. Carlton and Jeffrey M. Perloff, *Modern Industrial Organization*, Second Edition (New York: Harper Collins College Publishers, 1994), at 104-07.

system, there will be a delay in both the cost associated with developing the satellite system and the benefits that will be realized.

14. Using the formula for the net present value of a stream of net benefits,[12] we can calculate the cost of delay for each million dollars in annual expected net benefits, including both consumer and produce benefits, that the satellite system will generate. The cost of delay will depend on the length of delay as well as the amount of time between licensing and launch of services. For example, if a system would come into service three years after licensing,[13] the present value of the cost of a two year delay in licensing would be approximately $1.7 million for each million dollars of expected net annual benefits, assuming an interest rate of 5 percent.[14]

2. Development of Technology

15. Our desire to revise our satellite licensing procedure is also driven by the development of new technology and new satellite services. Our current procedure was developed in the early 1980s, and in many cases has not fit well with newer satellite services. When the current procedure does not fit well with new satellite service applications, it is generally because the new service has needed a new frequency allocation, and this requires a potentially complex rulemaking proceeding. Those complexities are compounded in processing rounds for licenses for new mobile satellite services (MSS) and non-geostationary satellite orbit (NGSO) constellations, because these services often need new frequency allocations for feeder links[15] or intersatellite links, in addition to the service band links. We discuss these issues in more detail below.

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[12] Stephen A. Ross, Randolph W. Westerfield and Jeffrey Jaffee, *Corporate Finance*, Fourth Edition (Chicago: McGraw-Hill Companies, Inc., 1996), at 79.

[13] Under standard industry practice, it generally takes two to three years to construct and launch a satellite. *See, e.g.*, Application of Comsat Corp., *Order*, 12 FCC Rcd 12059, 12075 n.68 (Int'l Bur., 1997) ("It has been our experience that it takes an average of two years to construct and launch a satellite...."). However, Section 25.145(f) of the Commission's rules requires Ka-band GSO FSS licensees "[1] to begin construction of [their] first satellite within one year of grant, [2] to begin construction of the remainder within two years of grant, [3] to launch at least one satellite into each of [their] assigned orbit locations within five years of grant, and [4] to launch the remainder of [their] satellites by the date required by the International Telecommunication Union to assure international recognition and protection of those satellites." 47 C.F.R. § 25.145(f). *See also* Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, *Third Report and Order*, CC Docket No. 92-297, 12 FCC Rcd 22310, 22334-35 (para. 61) and n.77 (1997) (*Ka-Band Service Rules Order*). For a system that would come into service five years after licensing, the cost of a two-year delay in licensing would be approximately $1.5 million per $1 million in expected annual benefits.

[14] At a higher interest rate, the present value of the costs of delay would be smaller. For example, at a 10 percent interest rate, the present value of the cost of delay would be approximately $1.4 million.

[15] "Feeder links" are radio links that transmit a user's messages in both directions between the system's satellites and the gateway earth station that connects the MSS network with the public switched telephone network.

16. Generally, we consider space station applications using the processing round approaches that were initially developed in the early 1980s for the fixed satellite service systems using the geostationary satellite orbit (GSO).[16] We established this approach because it is one way to insure that all mutually exclusive applications are processed fairly and that authorizations are granted equitably. This approach, however, has been extended to other satellite services, such as MSS and NGSO constellations. Over time, it has become more and more difficult to resolve the issues raised by the mutually exclusive MSS and NGSO applications in a service rulemaking. These difficulties stem in part from the advent of the new technologies over the last decade, which has resulted in many space station applications for use of frequency bands that were not allocated for the proposed new services. In addition, many of the proposed services had not had sharing criteria developed nor service rules to authorize the proposed systems.

17. The difficulties of addressing MSS and NGSO applications in processing rounds are compounded by the fact that new satellite system designs are comprised of various constellation designs and of different frequency bands that are needed to support the service links in both the up and down link directions, different feeder links in both the up and down link directions, and intersatellite links. All of these frequency band combinations have created a multifaceted licensing mosaic. For example, a processing round cutoff date established for the service link frequency bands of an MSS system applies only to the mutually exclusive applications in the service link frequency band. The specific cutoff date does not fully address the mutually exclusive situation that may have been created in the proposed feeder link bands, or the intersatellite link bands where the affected parties may have been different than those established in the service link frequency bands. Furthermore, there have been cases in which different applicants have requested authority to use different frequencies for feeder links or intersatellite links, even though they have requested authority to use the same service band frequencies. Also, in some instances, the service link bands may have been allocated for the proposed services but the feeder link and the intersatellite link frequencies may not have been. In those cases, the Commission could not act on the applications until it completed proceedings to adopt the relevant service rules and to allocate any frequency bands needed for service links, feeder links, or intersatellite links.

18. This mosaic has resulted in the Commission granting piecemeal authorizations. Each portion of the application was granted on a frequency band basis, with some parts of the applications not being authorized until one or two years later when the resultant allocations and service rules were adopted. Thus, the licensing process that had been established primarily for addressing geostationary FSS in the C-band and the Ku-band has been stretched to accommodate other satellite services which had multiple frequency band requirements, and so affected each frequency band differently. Consequently, complete individual application authorizations were delayed, in some instances for several years, to address all of the different frequency bands that were requested in a specific space station or satellite system application.

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[16] One exception is replacement satellites. We have usually acted on applications for replacement satellites as they are filed, without consolidating them into a processing group. Loral Space & Communication Ltd., f/k/a Orion Atlantic, L.P., for Authority to Launch and Operate a Hybrid Ku-band/C-band Satellite System at the 37.5° W.L. Orbit Location, *Memorandum Opinion and Order*, 16 FCC Rcd 12490, 12492 (para. 7) (Int'l Bur. 2001); GE American Communications, Inc., *Order and Authorization*, 10 FCC Rcd 13775, 13775-76 (para. 6) (Int'l Bur. 1995) (*GE Americom Replacement Order*); Loral Spacecom Corp., *Order and Authorization*, 13 FCC Rcd 16348, 16440 (para. 5) (Int'l Bur., Sat. and Rad. Div., 1995).

3. Revision of ITU Procedures

19. Another relevant point is our ITU Treaty obligations, which have changed significantly for satellites during the last decade; *i.e.*, ITU filing requirements for different satellite services have changed. Significantly, the required time to bring satellite systems into use has been shortened by two years. Thus, satellite operators must bring their systems into use in seven years instead of nine, or else the licensing country loses filing date priority status for the satellite network with respect to subsequent dates of filing by other administrations. Furthermore, requests for coordination of satellite networks with other relevant administrations must now be filed with the ITU within two years after receipt of required advance publication information. The coordination request has system design information that is usually very specific to the satellite system to be implemented. Consequently, it must reflect the system that is to be licensed to use the specific frequency bands and orbit locations. In addition, different frequency bands and different services in many cases have different ITU filing requirements. These requirements affect the Commission's ability to file on behalf of U.S. applicants advance publication information, coordination requests, and notifications with the ITU in a timely manner so as to support effectively U.S. satellite system applications and the subsequent Commission authorizations for use of the different frequency bands.[17]

20. In addition, U.S. satellite systems should be authorized as quickly as possible, to provide the protection of the date priority for the authorized satellite system within the ITU coordination process. Date priority is becoming more and more important as more U.S. satellite operators seek access to mutually exclusive orbit locations and frequency bands, and as systems licensed by other countries are implemented and compete for access to different markets, including the U.S. market. The ITU recently implemented cost recovery fees associated with certain filings, and issues surrounding payment of these fees may create a need to license U.S. satellite systems prior to submitting the filing to the ITU. Otherwise, there is a risk that a licensee will refuse to pay the ITU fees in a timely manner. There is also a potential for an applicant to pay these fees but in the long run not receive Commission authorization, or to pay the fees and to create the appearance of prejudging a Commission authorization decision. In all these cases, U.S. date priority within the ITU process could be lost.

4. Spectrum Efficiency

21. Spectrum is a limited resource. Similarly, the geostationary satellite orbit can accommodate only a finite number of satellites operating in any frequency band. Therefore, it is important to adopt rules and policies that promote the maximum use of these limited vital resources. By exploring ways to issue satellite licenses more quickly, we can reduce the amount of time orbit and spectrum resources lie fallow.

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[17] There have been cases where the United States has lost or almost lost date priority within the ITU process. *See* Columbia Communications Corporation, *Memorandum Opinion and Order*, 15 FCC Rcd 15566, 15569 (para. 7) (Int'l Bur. 2000) (*First Columbia Milestone Order*) (describing case in which the United States almost lost ITU date priority for the Ku-band licensed to Loral at the 47° W.L. orbit location.)

5. Public Interest

22. In order to serve the American public, the Commission, as an institution, must be efficient, effective, and responsive. The challenges of reaching these goals at the Commission are complicated by the sweeping, fast-paced changes that characterize the industries it regulates. Given the important role the satellite industry plays in the U.S. and world economy, the public interest demands that we continually review our procedures and improve them whenever possible. In addition, as explained further below, the Supreme Court has recognized that the Commission must have authority to adopt rules to further the public interest.[18] Thus, for the reasons discussed above, including but not limited to maintaining our rightful date priority within the ITU process, we must consider possible means to expedite the satellite licensing process to further the goals of good government and to be responsive to the needs of the satellite industry and its customers.

23. In light of this discussion, and our responsibility to further the public interest, convenience, and necessity,[19] we are committed to acting on satellite applications as quickly as our processes will allow. We have made considerable progress recently in reducing the number of satellite applications pending before the Commission. However, if we can expedite the satellite licensing process, we will be able to reduce the number of pending satellite applications at a faster rate in the future. As a result, the pernicious economic effects of delay and the risk of losing date priority within the ITU process will be alleviated more rapidly than might be possible under our current procedure.

D. Summary

24. It is essential that we conduct a technical review of applications before we act on them. Nevertheless, there are a number of factors other than our technical review that can slow down the satellite licensing process, including the need for international and domestic frequency allocations, the adoption of service rules, the current procedures for processing rounds, international coordination requirements, and the extension of the processing round procedure to non-FSS applications. For the reasons discussed in Section II.C. above, we believe that it would further the public interest to make the satellite licensing process as streamlined as possible without limiting our ability to protect against harmful interference to adjacent satellite systems.

25. The international allocation process is not within the Commission's control. In addition, a rulemaking attempting to address all the issues within our control, such as service rule proceedings, would be very large and unwieldy. Accordingly, we initially focus our attention on revising the space station licensing process. This is the most recent of many proceedings we have conducted over the years to streamline our satellite and earth station licensing rules.[20]

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[18] *See* Section III.B.9., *citing* United States v. Storer Broadcasting Co., 351 U.S. 192, 202-04 (1956) (*Storer*); National Broadcasting Co. v. United States, 319 U.S. 190, 230 (1943).

[19] 47 U.S.C. § 309(a).

[20] Amendment of Part 25 of the Commission's Rules and Regulations to Reduce Alien Carrier Interference Between Fixed-Satellites at Reduced Orbital Spacing and to Revise Application Processing Procedures for Satellite Communications Services, *First Report and Order*, CC Docket No. 86-496, 6 FCC Rcd 2806 (1991); Streamlining the Commission's Rules and Regulations for Satellite Application and Licensing Procedures, *Report and Order*, IB Docket No. 95-117, 11 FCC Rcd 21581 (1996) (*1996 Streamlining Order*).

Specifically, in Section III. below, we invite comment on two alternatives. One option is a first-come, first-served procedure similar to that adopted by the Commission for FM radio and television stations in 1985.[21] The other option involves adopting procedures to modify and streamline the current process. In addition, in Section IV., we propose expanding our information requirements to enable us to expedite our application review process. In Section V., we invite comment on issues raised by other proposals to streamline the satellite licensing process, such as revising our milestone requirements, eliminating the anti-trafficking policy, and streamlining the process for replacement satellite licenses.

III. REFORM OF SATELLITE LICENSING PROCEDURE

A. Introduction

26. We invite comment on two alternatives for revising our satellite processing procedure. The first option is a first-come, first-served approach, based in large part on the procedure we used for FM radio and television licenses from 1985 to 1998, when we obtained auction authority for these services.[22] The second option is to reform and streamline our current processing round procedure. As a preliminary matter, we invite comment on which of these general approaches would provide a better means for revising the satellite licensing process. Parties commenting on this general issue should explain why they believe that one option is better than the other at meeting our policy goal of expediting the satellite licensing process. Furthermore, we seek general comment on whether or to what extent either of the proposals set forth below has any effects on satellite operators' incentives or abilities to provide service to rural areas, or on our ability to encourage service to rural areas.

27. Below, we seek detailed comment on issues raised by both these proposals. We discuss the first-come, first-served option in more detail because this is the first time we have considered adopting it formally with respect to satellite licenses, and therefore it raises several issues that must be resolved in the event we adopt this proposal.

B. First-Come, First-Served

1. Background

28. Prior to 1985, the Commission used "cut-off" procedures to process applications to provide broadcast FM service. These cut-off procedures were very similar to the satellite procedures described above. In this regard, the cut-off procedures for the FM service involved a

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[21] Amendment of the Rules Concerning Cut-Off Procedures for FM and TV Broadcast Stations, *Report and Order*, MM Docket No. 84-750, FCC 85-125, 50 Fed. Reg. 19936, 19941-42 (paras. 33-36) (May 13, 1985) (*TV and FM Broadcast Order*), *recon. denied*, 50 Fed, Reg. 43157 (Oct. 24, 1985), *aff'd without published opinion sub nom.* Hilding v. FCC. 835 F.2d 1435 (9th Cir. 1987), *reprinted at* 58 Rad. Reg. 2d 776 (1985). In *Hilding*, the Court rejected the petitioner's challenge of the broadcast first-come, first-served rule because it found that the Commission reasonably concluded that its rules balanced the competing public interest concerns better than alternative rules proposed by the petitioner.

[22] *See* Implementation of Section 309(j) of the Communications Act, Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses, *First Report and Order*, MM Docket No. 97-234, 13 FCC Rcd 15920 (1998).

lead application, a public notice that invited the filing of applications mutually exclusive with the lead application, amendments, and petitions to deny and replies.[23]

29. In 1985, the Commission determined, *inter alia*, that the FM cut-off procedures delayed service to the public and resulted in substantial costs to the Commission and the lead applicant.[24] It therefore replaced the cut-off procedures "with an alternative processing system designed to expedite authorization of new or expanded service to the public."[25] The new processing system was called "first come, first served."[26]

30. In the FM service, first come, first served is a two-part procedure. First, when a channel is added to the Table of Allotments,[27] a 30-day application filing "window" is opened. This window begins 30 days after the announcement of the channel allotment is published in the Federal Register, and closes 60 days after that announcement date.[28] All applications filed during the filing window are considered together.[29] Second, if no acceptable applications are filed during the filing window, any applications filed after the window is closed are considered on a first-come, first-served basis.[30] In other words, the first acceptable application cuts off the rights of subsequently filed applications.[31] Those subsequent applications are kept on file and considered in the order they are filed in the event that all earlier-filed applications are denied.[32] Once an application is granted, all other parties filing subsequent applications are informed by letter that their applications have been dismissed.[33]

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[23] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19937 (para. 8).

[24] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19938 (para. 9). These concerns were further punctuated by an anticipated influx of applications for 689 new FM channels. *TV and FM Broadcast Order*, 50 Fed. Reg. at 19941 (para. 29). *See also* Modification of FM Broadcast Station Rules to Increase the Availability of Commercial FM Broadcast Assignments, *Report and Order*, BC Docket No. 80-90, 94 FCC 2d 152 (1983).

[25] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19936 (para. 1).

[26] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19937 (para. 1).

[27] The Table of Allotments is a list of permissible FM and TV stations prescribed in the Commission's rules. See 47 C.F.R. §§ 73.202 (FM radio), 73.606 (television). This is discussed further below.

[28] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19940-41 (paras. 28-29).

[29] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19941 (para. 30).

[30] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19941 (para. 33). The Mass Media Bureau issues a public notice announcing when the first-come, first-served procedure becomes applicable to a particular channel. In other words, it announces that no applications were filed during the window, or that all the applications filed during the window were found unacceptable for filing or were denied. Operation of "First Come/First Serve" FM Broadcast Application Processing System, *Public Notice*, FCC 86-265 (released May 22, 1986), *reprinted at* 51 Fed. Reg. 23764 (July 1, 1986).

[31] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19941 (para. 33).

[32] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19941-42 (para. 34).

[33] *See, e.g.*, Letter from Dennis Williams, Chief, FM Branch, Audio Services Division, Mass Media Bureau, to Mr. and Mrs. James Stargel (file no. 8920-ALM).

31. The success of first-come, first-served and related measures in the FM service was dramatic and substantial.[34] The Commission's experience with this first-come, first-served procedure in the broadcast area may provide a potentially sound, efficient basis for revising our satellite licensing process. Below, we invite comment on appropriate procedural revisions consistent with a first-come, first-served approach, with certain modifications to make it fit satellite licenses. In particular, we do not include a filing window in our proposed satellite first-come, first-served procedure. This is because FM radio and television are planned services. In other words, the permissible FM and TV stations are allotted in the Commission's rules.[35] If an individual wished to construct a new FM or TV station, it would have to file a petition for rulemaking to revise the Table of Allotments, and show that the proposed new station would not cause harmful interference to any previously licensed station. Most satellite services are not planned services.[36] There is no Table of Allotments for satellite service in the Commission's rules. Therefore, as explained further below, we do not believe that a filing window is necessary for most satellite licenses.[37]

2. General Framework

32. We seek comment on replacing satellite processing rounds with a first come, first served procedure. Under this approach, only the first-filed acceptable application for a particular geostationary satellite orbit (GSO) satellite license would be considered. Similarly, only the first-filed acceptable application for a particular non-geostationary orbit (NGSO) satellite system license would be considered. Therefore, we will be able to resolve the issues raised by the first-filed application(s) more quickly and easily than we could if we had to act on those issues in conjunction with many other applications.

33. In cases where frequencies have been allocated for the proposed service, and we have adopted service rules, we would issue a public notice inviting comment on the lead application. Subsequently filed mutually exclusive applications would be included in a queue according to their date of filing. If for any reason we cannot grant the lead application, we would dismiss the lead application and begin consideration of the next application in the queue and continue this process until we can grant an application.

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[34] During the first three years after the Commission adopted a first-come, first-served procedure for broadcast applications, from 1985 to 1988, the number of broadcast applications received per year increased by 54 percent. Although the first-come, first-served procedure did not prevent our backlog from increasing during this period, it enabled us to decrease our backlog subsequently, from a peak of about 2500 to about 600 in 1991, the lowest level at that time since 1977. *See* Amendment of Part 73 of the Commission's Rules to Modify Processing Procedures for Commercial FM Broadcast Applications, *Notice of Proposed Rulemaking*, MM Docket No. 91-347, 6 FCC Rcd 7265, 7266 (paras. 9-10) (1991).

[35] *See* 47 C.F.R. §§ 73.202 (FM radio), 73.606 (television).

[36] The exception is Direct Broadcast Satellite (DBS) service, also known as Broadcast Satellite Service (BSS). DBS is a planned service. The Table of Allotments appears in the ITU Radio Regulations rather than our rules. *See* ITU Radio Regulations, Appendices S30 and S30A. We refer to the BSS Band Plan in Section 100.13(b) of our rules, 47 C.F.R. § 100.13(b).

[37] *See* Section III.B.3.

34. After we issue a license, we would keep the subsequently filed applications on file. If at any time the licensee loses its license, for failure to meet a milestone or for any other reason, the next application in the queue would be considered. If and when the licensee places its satellite or satellites in operation, we propose returning the later-filed applications to those applicants. We also propose allowing the applicants to request the fees associated with its application to be returned, no later than 15 days after a public notice stating that the licensee has placed its satellite or satellites into operation. We have similar provisions in our rules for applications filed under our TV and FM first-come, first-served procedure.[38] In addition, we invite comment on allowing an applicant to request the return of the application fee if it voluntarily withdraws its application before it is placed on public notice. After we place the application on public notice, we would begin our consideration of the application, and returning the application fee would no longer be appropriate at that point.

35. In cases where there is a frequency allocation for the proposed service, but we have not adopted service rules, we would identify the lead application and place all subsequently filed applications in a queue. However, we would not act on any of the applications until we have adopted service rules. Once the service rules have been adopted, we would permit the applicants to amend their applications. In this regard, we also propose revising our rules to allow applicants a specified, limited time to amend their applications, such as 40 days after publication of the revised service rules in the Federal Register, or 10 days after the effective date of those rules, whichever is later. This should give applicants sufficient time to amend their applications. After that amendment window has expired, we would issue a public notice inviting comment on the earliest-filed application. Thereafter, we would follow the procedures noted in paragraphs 33 and 34 above.

36. We anticipate that we could use the service rules proceeding to address any issues that may arise regarding promotion of multiple service providers, if possible. In other words, we could use the service rules proceeding to determine how much spectrum is needed to provide the service at issue. If we determine that a service provider needs no more than 100 MHz, for example, then we could limit licenses granted pursuant to the procedures described in paragraph 33 to 100 MHz each. In this case, if 500 MHz of spectrum were allocated to a particular service, we would issue licenses to the first five qualified applicants in the queue. We invite interested parties to propose methods or criteria for determining the amount of spectrum needed to provide a service.

37. In cases where there is no international or domestic frequency allocation for the proposed service, we would require parties to file an application. The application would remain pending until the frequencies were allocated. In the past, the Commission used the satellite system applications received in processing rounds as justification to pursue an international allocation for the service, and we would expect to continue this practice. Once frequencies have been allocated, we would follow the same procedure noted above in paragraphs 33 through 36.

38. Some MSS services use feeder links, which are radio links that transmit a user's messages in both directions between the system's satellites and the gateway earth station that connects the MSS network with the public switched telephone network.[39] Other satellite services employ inter-satellite service links, by which satellites in a constellation may communicate with

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[38] *See* 47 C.F.R. § 1.1113(c).

[39] *See 2 GHz Order*, 15 FCC Rcd at 13156 (para. 68).

each other.[40] Feeder links and inter-satellite links use different frequency bands than the service link bands, and in some cases, applicants have applied for authority to use feeder links or inter-satellite links before frequencies were allocated to those non-service band links. Under our first-come, first-served procedure, we propose allowing parties planning to use feeder links or inter-satellite links to continue this practice. In other words, if an applicant seeks authority to operate in service bands and in feeder links or inter-satellite links, we would follow the procedure described above in paragraphs 32 through 36 for the service band, regardless of whether frequencies have been allocated for the feeder links or inter-satellite links. We would issue licenses once the service band frequencies have been allocated and service rules have been adopted, regardless of whether frequencies have been allocated for feeder links or inter-satellite links. Finally, we propose considering amendments to pending service band satellite applications and modifications to licenses to add feeder link authority or inter-satellite link authority to the application or license. Applicants will be on notice, however, that we will not extend milestones simply because allocations for feeder links or inter-satellite links have not been made.[41]

39. Also, in cases where two applicants request mutually exclusive feeder link or inter-satellite link authority, we would consider the applications in the order that they are placed in the queue under the procedure described above in paragraphs 33 through 37. We realize that this may result in granting service band authority and feeder link authority to different parties. However, in most cases where an applicant is not authorized to use the feeder link frequencies it requested, it should be able to apply for and be granted authority to operate in other feeder link frequencies. That feeder link assignment should meet the applicant's needs as well or almost as well as its original request. We solicit comment on this analysis.

40. We believe that this procedure would further the public interest because it would reduce the time needed to process a satellite license application, thereby expediting the provision of useful services to the public, including but not limited to service to rural and unserved areas. In particular, by focusing on the merits of each application individually and according to their date of filing to the extent necessary, we believe that we would be able to act in a much more efficient and expeditious manner.

41. Some observers may criticize a first-come, first-served approach as overemphasizing speed of service at the expense of diversity of, and competition among, satellite operators.[42] On one hand, some observers may assert that larger satellite operators are more likely than smaller operators to be able to complete and file their applications first. On the other hand, in addition to the improvements in speed of service, a first-come, first-served approach for satellite licenses could benefit smaller satellite operators by eliminating a large portion of the legal expenses needed to maintain an application throughout the laborious processing round procedure. Also, as long as new companies see opportunities to provide profitable satellite services, we should continue to receive applications from both existing and new companies. Given all of the above,

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[40] *See 2 GHz Order*, 15 FCC Rcd at 13156 (para. 68); PanAmSat Licensee Corp. Application for Authority to Construct, Launch, and Operate a Ka-Band Communications Satellite System in the Fixed-Satellite Service at Orbital Locations 58° W.L. and 125° W.L., *Memorandum Opinion and Order*, 16 FCC Rcd 11534, 11535 (para. 4) (2001) (*PanAmSat Ka-band License Cancellation Review Order*) (petition for review pending).

[41] *PanAmSat Ka-band License Cancellation Review Order*, 16 FCC Rcd at 11538-40 (paras. 14-18).

[42] *See TV and FM Broadcast Order*, 50 Fed. Reg. at 19940 (para. 26).

we seek comment on this first come, first served proposal, including the extent to which the first-come, first-served option encourages or discourages competition among satellite operators, and provision of service to rural and unserved areas.

3. Filing Window

42. As part of its procedure for broadcast licenses, the Commission included a 30-day filing window. All applications filed during that window were considered together on a consolidated basis, while the first-come, first-served procedure applied only to applications filed after the close of the window.[43]

43. Although our broadcast first-come, first-served procedure included a filing window, we do not believe that a filing window is required for our first-come, first-served proposal for satellite license applications. That is because, unlike FM radio, most satellite services generally are not planned services.[44] As explained above, generally, the Commission does not determine when to make an orbital location and associated frequency band available for licensing in a particular frequency. Rather, we allow the private sector to take the initiative in determining whether, and when, to file an application and for which satellite uses to apply. In other words, applicants can seek authority to operate a satellite at any time, without waiting for the Commission to invite applications.[45]

44. We do not see the need to adopt any filing window mechanism in a first-come, first-served procedure for satellite applications for either GSO or non-GSO systems. This is because a filing window in these circumstances would tend to duplicate one of the greatest sources of delay in the current processing round procedure. Specifically, it would tend to require us to consider together several mutually exclusive applications. However, under our first-come, first-served proposal, a single satellite application filed on a given day will be treated as a processing round of one, which would cut off the filing rights of applications filed on any subsequent day. We seek comment on this analysis. (We address issues raised by two or more mutually exclusive applications filed on the same day in Section III.B.4. below.)

4. Selection Among Mutually Exclusive Applications

45. If we adopt the first come, first served proposal, we will need to establish some procedure for cases in which two or more mutually exclusive space station applications are filed on the same day. Below, we invite comment on mandatory electronic filing for satellite applications.[46] If we adopt mandatory electronic filing for satellite license applications, we seek comment on considering the applications in the chronological order that they are filed as part of any first-come, first-served procedure we may adopt. For purposes of determining the order in which we consider applications, we propose looking to the actual time that the application is

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[43] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19940-41 (paras. 28-30).

[44] As we noted above, the exception to this general rule is the DBS service. The ITU has adopted a plan for DBS service, and the United States has been given a limited number of assignments for the service. *See* ITU Radio Regulations, Appendices S30 and S30A.

[45] *See* Section II.B. *supra* (explaining that the current satellite application procedure begins with a lead application from a member of the public).

[46] Section V.D.

received in our IBFS electronic filing system, to the nearest thousandth of a second, regardless of whether we receive the application after the close of business or during a weekend.[47] Because it seems very unlikely at best that two applicants would submit their applications at the same thousandth of a second, we believe that this approach will enable us to avoid any mutually exclusive situations that might otherwise arise. Furthermore, we believe that a mandatory electronic filing requirement for satellite applications is potentially more fair to all potential applicants than a process that permits paper applications. However, if commenters can show that basing priority on thousandths of a second might disadvantage applicants based further away from Washington, D.C. because of the time needed to route applications through the Internet, we will consider proposals from those commenters in this proceeding to base priority on the time of receipt of the filing rounded to the nearest minute. We invite comment on all these issues.

46. In the event that we adopt a first-come, first-served procedure in which we may need to consider two or more satellite applications together, we would propose a second-tier selection mechanism of imposing a mandatory sharing mechanism on competing applicants. Specifically, we propose dividing the available spectrum by the number of mutually exclusive applicants to be considered together. This is the approach we adopted in the *2 GHz Order*. We further propose not assigning a particular frequency band segment to any applicant.[48] The first applicant to launch its satellite, or one of its satellites in the case of an NGSO constellation, will be allowed to choose which frequency band segment it will be authorized to use.[49] The applicant would be required to notify the Commission of its selection by requesting a modification of its license.[50]

47. In the *2 GHz Order*, we concluded that this band segmentation approach is equally applicable to GSO and NGSO systems.[51] We tentatively conclude that this approach should not be limited to 2 GHz systems, but should be applied to satellite systems in other frequency bands. Regardless of whether we consider together two mutually exclusive applications for collocated GSO satellites, two NGSO satellite constellations, or one GSO and one NGSO system, neither licensee should cause harmful interference into the other satellite system because both systems will be authorized to operate in different band segments. We base this tentative conclusion on existing satellite technical and operations rules, including our limitations on out-of-band emissions in Section 25.202(f) of our rules.[52] In other words, we believe that our current rules are adequate to prevent harmful interference into another satellite system operating in an adjacent

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[47] In other words, an application filed at or before 11:59 PM on any given calendar day will not be treated as if it was filed on the following business day for purposes of determining the place of the application in the queue.

[48] *2 GHz Order*, 15 FCC Rcd at 16138 (para. 16).

[49] *2 GHz Order*, 15 FCC Rcd at 16138 (para. 16).

[50] *See 2 GHz Order*, 15 FCC Rcd at 16138 (para. 16) (allowing licensees to select frequency band segment at the time they bring the first satellite in their systems into operation).

[51] *2 GHz Order*, 15 FCC Rcd at 16138 (para. 16).

[52] 47 C.F.R. § 25.202(f).

frequency band segment. This is consistent with our conclusion in the *2 GHz Order*.[53] We seek comment on this analysis.

48. The *2 GHz Order* did not specify any policy regarding cases in which a licensee is not able to implement its system. Rather, we stated that we would decide whether to redistribute the spectrum or allow new entrants at the time any license is cancelled.[54] Here, we propose adopting a policy of redistributing the spectrum to the licensee or licensees remaining in operation, as part of any first-come, first-served procedure we may adopt, on a going forward basis. This process seems likely to put the spectrum into use providing service more quickly than any other alternative.

49. Finally, if for any reason we decide not to adopt our mandatory electronic filing proposal below, we seek comment on considering all electronically filed space station applications filed on a particular day before all paper applications filed on that day. If two or more paper applications were filed on the same day, we could impose the mandatory sharing mechanism discussed above.

50. Some parties might argue that our proposed selection mechanisms would preclude negotiations among mutually exclusive licensees, and that in many cases, those negotiations could result in a better arrangement for all applicants. We disagree that our proposed selection mechanisms would preclude or even discourage negotiations. Many economists have demonstrated that creating clearly defined initial rights encourages rather than discourages subsequent negotiations.[55] Thus, adopting a procedure that enables us to define the operating authority of satellite licensees very clearly should facilitate negotiations among those licensees.[56] Furthermore, if the applicants reach an agreement that differs from an equal division on the available spectrum among the applicants before we issue licenses, we would consider their agreements. Nevertheless, as an additional alternative, we seek comment on allowing some amount of time, such as 60 days after the record closes on the applications, for the parties to negotiate a solution. If the applicants could not reach an agreement by that time, we would divide the available spectrum equally among the applicants.

5. Safeguards Against Frivolous or Speculative Applications

51. When the Commission adopted its first-come, first served procedure for TV and FM broadcast licenses, it also adopted precautions to counteract any incentives that might result in an

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[53] *2 GHz Order*, 15 FCC Rcd at 16194-95 (para. 157) (concluding that no additional restrictions one out-of-band emissions were warranted at that time, but noting that we had invited comment on considering out-of-band emission issues in an ITU working group).

[54] *2 GHz Order*, 15 FCC Rcd at 16139 (para. 18). We emphasize that we are not addressing this 2 GHz issue in this proceeding, nor are we addressing any similar issues raised in any proceeding in which we have issued licenses in the past.

[55] *See, e.g.*, Howard A. Shelansky and Peter W. Huber, *Administrative Creation of Property Rights to Radio Spectrum*, 14 J.L. Econ. 581-607 (1998); R.H. Coase, *The Problem of Social Cost*, 3 J.L. Econ. 1-44 (1960); Richard A. Posner, *Economic Analysis of Law* (Boston: Little, Brown and Co., 1972) at 10-40.

[56] Below, we propose eliminating our anti-trafficking policy. This should further encourage negotiations.

influx of license applications, some or many of which might be frivolous or speculative.[57] Accordingly, we invite comment on measures to discourage speculative or frivolous satellite applications in the event that we adopt a first-come, first-served approach. First, the *TV and FM Broadcast Order* placed a limit on the number of applications that any applicant could have pending before the Commission.[58] We also note that our rules currently limit the number of additional orbital locations in each frequency band for satellite operators with previously authorized but unlaunched satellites in that band.[59] Therefore, we seek comment on limiting pending new license applications of all applicants in any first-come, first-served procedure we may adopt, and on what the limit should be. In other words, once the applicant has reached this limit, we would not consider any additional applications unless the applicant withdrew one of its previously filed applications. We invite comment on setting this limit at five GSO orbital locations per applicant, and one NGSO satellite constellation per applicant, in each frequency band. We also solicit comment on whether this requirement should be limited to pending applications, or whether we should also preclude licensees with more than five previously authorized but unlaunched GSO satellites or more than one licensed by unimplemented NGSO systems in any frequency band from applying for additional satellite licenses.

52. If we limit the number of orbit locations or constellations that an applicant can have pending, we must also invite comment on determining who is an "applicant" for purposes of this limit. We have not considered adopting such attribution rules for satellite operators in the past.[60] We propose basing this requirement on the standard that we adopted for determining eligibility for the "new entrant" bidding credit in auctions for commercial broadcast service licenses. In that context, we defined an "attributable interest" as one in which the equity (including all stockholdings, whether voting or non-voting, common or preferred) and debt interest or interests, in the aggregate, exceed 33 percent of the total asset value (defined as the aggregate of all equity plus all debt) of the winning bidder.[61] In this context, we propose adopting a rule that would prohibit a party from filing a satellite application if it holds more than 33 percent of the total asset value of applicants with applications for five GSO orbital locations, and one NGSO satellite system, in any frequency band, pending before the Commission.

53. Furthermore, we propose prohibiting applicants from allowing other entities to assume their place in any queue. Without this prohibition, it is possible that some parties would file satellite applications simply to obtain a place in a queue to sell to another party willing and

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57 *TV and FM Broadcast Order*, 50 Fed. Reg. at 19939 (paras. 19-20).

58 *TV and FM Broadcast Order*, 50 Fed. Reg. at 19940 (para. 24), *citing* Storer Broadcasting Co., 43 FCC 1254, 1256 (1953).

59 "Each applicant found to be qualified pursuant to this section may be assigned no more than one additional orbital location beyond its current authorizations in each frequency band in which it is authorized to operate, provided that its in-orbit satellites are essentially filled and that it has no more than two unused orbital locations for previously authorized but unlaunched satellites in that band." 47 C.F.R. § 25.140(f).

60 *See e.g.*, Second Round Assignment of Geostationary Satellite Orbit Locations to Fixed Satellite Service Space Stations in the Ka-band, *Order*, 16 FCC Rcd 14389, 14396 (para. 19) (Int'l Bur., 2001) (*Second Round Ka-band Orbital Assignment Order*).

61 47 C.F.R. 73.5008(c); Implementation of Section 309(j) of the Communications Act -- Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses, *Memorandum Opinion and Order*, MM Docket No. 97-234, 14 FCC Rcd 12541 (1999).

able to implement its proposed satellite system. This would be a large loophole in our safeguards against speculative satellite applications. Similarly, to prevent applicants from bypassing this prohibition by merging with another company or transferring control of its business, we propose treating such transactions as major amendments that cause any pending applications filed by that applicant to be treated as a new application for purposes of determining processing order. In other words, we do not propose a blanket prohibition on such transfers that otherwise meet the requirements of our rules. Rather, we propose moving the pending applications of the parties in the transaction to the end of the relevant queue. We would not expect adoption of this proposal to deter a significant number of legitimate business transactions. In most cases in which the parties to the transaction have assets or provide services, the effects of the transaction on their pending satellite applications would appear to be a small consideration, especially given that they would have a limited number of pending applications under our proposed rules. We solicit comment on this proposal and assumption.

54. Finally, with respect to NGSO systems, we propose determining in the context of service rules proceedings the amount of spectrum that is sufficient from a technical perspective to enable the service provider to provide its proposed service. We also propose adopting rules that would allow us to limit licensees to that amount of spectrum. Without this proposed requirement, the first applicant for a particular NGSO system could possibly seek authority to use so much spectrum that granting its application without revision would unreasonably preclude other parties from attempting to enter the market. This would not be a good result. In another context, we have determined that our regulatory policies should not impede competitive market entry.[62] Accordingly, we invite comment on whether it is necessary to have provisions in Part 25 our rules to enable us to reduce the amount of spectrum requested by an NGSO license applicant in cases where granting the application as filed might create an unreasonable barrier to competitive market entry.

6. Amendments

55. When the Commission adopted the first-come, first-served procedure for broadcast license applications, it adopted rules allowing amendments to applications only for 30 days after the release of a public notice listing the license applications filed during the 30-day window.[63] Furthermore, the Commission concluded that amendments to an application that create a conflict with any other application filed prior to the amendment would cause the underlying application to lose its "status" relative to applications behind it in the queue.[64]

56. We currently have similar provisions in our satellite licensing rules. Section 25.116 states that a major amendment to a satellite license application causes that application to be treated like a new application. Thus, major amendments filed after the cut-off date cause the underlying application to be removed from the processing round.[65] Generally, a "major

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[62] *See* Access Charge Reform, *Fifth Report and Order and Further Notice of Proposed Rulemaking*, CC Docket No. 96-262, 14 FCC Rcd 14221, 14263-64 (para. 79) (1999) (*Incumbent LEC Pricing Flexibility Order*).

[63] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19941 (para. 31).

[64] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19941 (para. 31).

[65] 47 C.F.R. § 25.116(c).

amendment" is one that increases the potential for interference.[66] Accordingly, if we adopt our first-come, first-served proposal, we would revise Section 25.116 to make clear that filing a major amendment to a license application would cause the applicant to lose its status relative to other mutually exclusive applications filed prior to the amendment. We also seek comment on defining transfers of control as a major amendment that would cause the applicant to lose its status relative to other mutually exclusive applications filed prior to the time the transfer of control application is filed. We believe this is necessary to prevent speculation in places in the queue, as explained further above.[67] In addition, an applicant who files an application that does not meet our information requirements should not be allowed to amend its application to come into compliance and maintain its status relative to later-filed applicants. Accordingly, we propose prohibiting such amendments in the context of any first-come, first-served proposal we adopt. We seek comment on these proposals. We also invite additional proposals for clarifying our definition of "major amendment" in Section 25.116(b) of our rules.

7. Modifications

57. Modifications are changes to a licensee's operating authority after the license has been granted. Modifications to space station licenses are governed by Section 25.117(d) of our rules, which specifies only information requirements.[68] We place all space station modification applications on public notice before we consider them. We propose the following modification rules in conjunction with our first-come, first-served proposal. In cases where we granted the original application as part of a mandatory sharing arrangement to resolve a mutually exclusive situation, we propose not considering any modification seeking to increase bandwidth. In these cases, we presumably authorized the current licensees for the service in question to use all the bandwidth available, and so it would not be possible to authorize any licensee to use any additional bandwidth.[69]

58. For modifications to all other satellite licenses, we propose retaining our current procedure, if the modification application is not mutually exclusive with any pending new license application. If the modification application is mutually exclusive with any pending new license application, we propose placing the modification application behind other applications with priority in the queue, and behind any other previously filed conflicting application. The modification application would be placed in the queue behind previously filed new license applications, but would be considered before any subsequent new license or modification applications. This proposal would effect only modifications to licensed satellite system that would cause those existing satellite systems to become mutually exclusive with a pending application for a proposed satellite system. Examples of such modification requests would be to relocate a GSO satellite to a new orbital location, or to add a Ku-band payload to a licensed C-band satellite.

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66 47 C.F.R. § 25.116(b)(1).

67 Section III.B.5.

68 47 C.F.R. § 25.117(d).

69 We emphasize that, under all our proposals, we intend to retain our current policy that modification applications are business decisions under the control of the licensee and therefore do not warrant milestone extensions. *See PanAmSat Ka-band License Cancellation Review Order*, 16 FCC Rcd at 11538 (para. 13).

8. Hybrids

59. Hybrid satellites are satellites designed to operate in more than one frequency band. We do not wish to discourage deployment of hybrid satellites because there are cost benefits in implementing several service bands on a single space platform.[70] We believe that our proposed first-come, first-served procedure and selection mechanisms for mutually exclusive applications may accommodate hybrid satellites more easily than processing rounds. Therefore, facilitating hybrid satellite deployment, which would enable satellite operators to reduce their costs and the rates they charge for satellite services, is another public interest benefit that may flow from the adoption of our proposals.

60. We envision consideration of hybrid satellite applications under our proposed first-come, first-served procedure as follows.[71] In cases where the applicant is first in the queue in both frequency bands, we can simply grant the application. In cases where the applicant is first in the queue in only one frequency band, we can grant the applicant authority to operate in that band, and deny it authority to operate in the other band. In cases where there is a mutually exclusive situation in one or both of frequency bands at issue, our proposed mandatory sharing selection mechanism would allow us to grant the applicant authority to operate in a portion of the mutually exclusive band.

61. In cases where only one of the frequency bands has not been allocated for the service, or where we have adopted service rules for only one of the bands, we would grant authority to operate in that band. The application would remain pending with respect to the band without the international or domestic frequency allocation or service rules, as described in Section III.B.2. However, we do not contemplate extending the milestones in the license granted in one band because the frequency allocation or service rules proceeding in the other band is still pending. Filing one hybrid satellite application rather than two single-band satellite applications is a business decision within the control of the applicant, and such business decisions do not warrant milestone extensions.[72]

9. Legal Analysis

62. The processing round process was developed in response to *Ashbacker*, a 1945 Supreme Court case.[73] In *Ashbacker*, the Court interpreted the hearing requirement in Section 309 of the Communications Act[74] to require the Commission to consider two mutually exclusive applications, both of which had been accepted for filing, in a comparative hearing before granting

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[70] *See, e.g., Ka-band Service Rules Order*, 12 FCC Rcd at 22322 (para. 31).

[71] To simplify this discussion, we assume that the application is acceptable for filing, and seeks authority to operate in two frequency bands.

[72] *See* American Telephone and Telegraph Company and Ford Aerospace Satellite Services Corporation, *Memorandum Opinion and Order*, 2 FCC Rcd 4431, 4435 (paras. 30-31) (*AT&T Order*); *PanAmSat Ka-band License Cancellation Review Order*, 16 FCC Rcd at 11538 (para. 13) (incorporating new hybrid capabilities into satellite design does not justify construction commencement milestone extension).

[73] Ashbacker v. FCC, 326 U.S. 327 (1945) (*Ashbacker*).

[74] 47 U.S.C. § 309.

one and denying the other.[75] At the time the Commission adopted the current processing round procedure, in 1983, it interpreted *Ashbacker* as permitting a cut-off procedure to preserve the rights of all existing applicants and all potential future qualified space station license applicants with concrete proposals for satellite systems.[76]

63. Subsequently, however, the Commission recognized that the first-come. first-served procedure also meets the *Ashbacker* requirements.[77] Specifically, in the *TV and FM Broadcast Order*, the Commission observed that *Ashbacker* allows it to promulgate regulations limiting the filing rights of competing applicants.[78] At the same time, *Ashbacker* leaves to the Commission's discretion the circumstances under which applications are considered mutually exclusive.[79]

64. We also observe that the Supreme Court's discussion in *Storer* is consistent with our first-come, first-served proposal.[80] In *Storer*, a broadcast license applicant argued that Section 309 required the Commission to consider its application even though granting the application would cause the applicant to exceed the Commission's limit on the number of broadcast stations that could be held by one party.[81] The Court held that the hearing requirement in Section 309 does not require the Commission to consider applications that are inconsistent with its rules. To interpret Section 309 otherwise would eliminate the Commission's rulemaking authority necessary for the orderly conduct of its business, and would preclude the Commission from adopting rules to further the public interest.[82] We believe that the first-come, first-served procedure would further the public interest by facilitating the United States administration in meeting its international regulatory deadlines.[83] If our current process makes it difficult to meet international regulatory deadlines, it could place U.S.-licensed satellite operators at a disadvantage relative to other satellite operators, and place the United States' leadership position in this industry at risk. Thus, under *Storer*, Section 309 of the Communications Act does not prohibit us from adopting a first-come, first-served procedure for satellite licenses.

65. We also believe that the *Arinc* case does not preclude consideration of our first-come, first-served proposal.[84] *Arinc* remanded a Commission rule requiring mutually exclusive

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75 *Ashbacker*, 326 U.S. at 330-31.

76 *1983 Cut-Off Order*, 93 FCC 2d at 1261 (para. 2), *citing Ashbacker*, 326 U.S. 327.

77 *TV and FM Broadcast Order*, 50 Fed. Reg. at 19938-39 (para. 16).

78 *TV and FM Broadcast Order*, 50 Fed. Reg. at 19939 (para. 16), *citing Ashbacker*, 326 U.S. at 333 n.9.

79 *See TV and FM Broadcast Order*, 50 Fed. Reg. at 19939 (para. 16), *citing* MCI Airsignal International, Inc., FCC 84-397 (released Aug. 17, 1984).

80 *Storer*, 351 U.S. 192.

81 *Storer*, 351 U.S. at 193.

82 *Storer*, 351 U.S. at 202-04, *citing*, *e.g.*, National Broadcasting Co. v. United States, 319 U.S. 190, 230 (1943).

83 *See* Section II.C., *supra*.

84 Aeronautical Radio, Inc. v. FCC, 928 F.2d 428 (D.C. Cir., 1991) (*Arinc*).

applicants to join a consortium, questioning the Commission's statutory authority to resolve mutually exclusive situations by adopting a rule foreclosing individual license applications.[85] Our proposal here is distinguishable from *Arinc* in that we do not propose foreclosing any applicant from filing any application at any time. Rather, we propose adopting rules establishing the circumstances under which we would consider applications to be mutually exclusive. Furthermore, even if the court's decision in *Arinc* were relevant, we note that many of the fundamental legal premises underlying that decision have been affected by subsequent amendments to the Communications Act. In *Arinc*, the court stated that the Act embodies a congressional policy that "comparable consideration ... is the process most likely to serve the public."[86] Congress, however, has since modified the Act to make available to the Commission alternatives to comparative licensing schemes. Congress's dissatisfaction with comparative hearings was prominently evidenced, for example, in its decision in 1993 to give the Commission permissive authority to resolve mutually exclusive license applications by auctioning spectrum licenses in certain radio services,[87] as well as in its expansion in 1997 of the Commission's auction authority. In 1997, Congress amended Section 309(j) by requiring that all mutually exclusive applications for initial licenses, including those for broadcast services, "shall" be auctioned except in certain cases not relevant here.[88] We note also that in adopting Section 309(j), Congress provided that the Commission should continue to avoid or reduce the likelihood of mutual exclusivity among applications when the Commission finds that it is in the public interest to do so.[89] These enactments are a clear indication that Congress does not consider the comparative hearing processes to be the exclusive means of effectuating the public interest. Moreover, consistent with these mandates, in the past the Commission has concluded that licensing mechanisms for international satellite services that avoid mutual exclusivity serve the public interest.[90] Thus, as the Commission explained in its decision on remand from *Arinc*, the

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85 *Arinc*, 928 F.2d at 450-53.

86 *Arinc*, 928 F.2d at 450.

87 *See* Omnibus Budget Reconciliation Act of 1993 (OBRA-93), Pub. L. 103-66, 107 Stat. 312, 387 (1993), § 6002(a) (codified at 47 U.S.C. § 309(j)). Congressional dissatisfaction with comparative hearings is clear in the legislative history of OBRA-93. Congress stated, for example: "The Committee finds that in many respects the FCC's current licensing methods for assigning spectrum have not served the public interest. Comparative hearings frequently have been time consuming, causing technological progress and the delivery of services to suffer." H.R. Rep. 111, 103rd Cong., 1st Sess. 248 (1993).

88 *See* Balanced Budget Act of 1997 (OBRA-97), Pub. L. 105-33, 111 Stat. 251 (1997), § 3002(a) (codified at 47 U.S.C. §§ 309(j), 397).

89 *See* 47 U.S.C. §§ 309(j)(3), 309(j)(6)(E).

90 The Commission reached this conclusion because, *inter alia*, the licensing of such satellite services requires international coordination; the inability of U.S. auctions to confer global licenses might prevent market entry by satellite providers interested in global service; and coordinated, multilateral-transnational auctions are not feasible. *See* Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Notice of Proposed Rule Making*, WT Docket No. 99-87, 14 FCC Rcd 5206, 5239-40 (para. 65) (1999). We note that Congress has recently excluded international and global satellite services from among the many services subject to the competitive bidding process now required by the Act. *See* Section 647 of the Communications Satellite Act of 1962, as amended by the ORBIT Act, 47 U.S.C. § 765f. This exclusion was prompted by concerns similar to those expressed by the Commission, particularly the concern that concurrent or successive auctions in the numerous countries in which U.S.-owned global satellite service providers seek licenses could place significant financial burdens

Commission historically has never used comparative hearings to select among satellite applicants.[91]

66. We note that the *TV and FM Broadcast Order* adopted a filing window as part of the first-come, first-served procedure adopted in that proceeding.[92] The Commission did not conclude, however, that a filing window is necessary to meet the requirements of *Ashbacker*, and we do not believe that such a conclusion would be correct. So long as all applicants fully meeting all pertinent licensing requirements have an equal opportunity for initial consideration and an opportunity for hearing if their application is denied, there is no basis for concluding that the procedure denies any applicant its rights to a hearing under Section 309 of the Communications Act. We believe that, because the first-come, first-served procedure we propose for satellite applications in this *Notice* provides such equal opportunities, it meets the requirements of the Communications Act and *Ashbacker*.

C. Modification and Streamlining of Current Procedure

1. Background

67. As an alternative to the first-come, first-served option discussed above, we propose modifying the current processing round procedure to eliminate a significant source of delay. In Section II.B. above, we describe the current satellite licensing process. Once we have allocated frequencies and adopted service rules, we can begin consideration of the satellite application. First, we initiate a processing round by establishing a cut-off date for mutually exclusive applications to be considered together with the lead application. Subsequently, in cases where sufficient spectrum is not available to accommodate all the proposed satellite systems, we encourage the applicants to negotiate "mutually agreeable" compromises so that all the applications can be granted.

68. Those negotiations can require several months or even years of effort. One recent example is the second Ka-band GSO processing round. The International Bureau (Bureau) initiated this processing round in October 1997.[93] The applicants began meeting informally to

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on providers of such services and thus threaten the viability and availability of global and international satellite services. *See* Report of Committee on Commerce, Communications Satellite Competition and Privatization Act of 1998, H.R. Rep. No. 494, 105th Cong., 2d Sess. 64-65 (1998). However, there is nothing in the ORBIT Act that suggests that Congress favors the use of comparative hearings or processing rounds instead.

[91] For example, the Commission stated that, because of the significant time required for construction and launch and rapidly developing satellite technology, the considerable time involved in comparative hearings would likely cause a substantial delay in service to the public unless the Commission adopted more pragmatic, timely approaches to licensing. Amendment of Parts 2, 22, and 25 of the Commission's Rules to Allocate Spectrum for and to Establish Other Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Service for the Provision for Various Common Carrier Services, *Final Decision on Remand*, 7 FCC Rcd 266, 269 (para. 20) (1992), *aff'd sub nom.* Aeronautical Radio, Inc. v. FCC, 983 F.2d 275 (D.C. Cir. 1993).

[92] *TV and FM Broadcast Order*, 50 Fed. Reg. at 19940-41 (paras. 28-32).

[93] *See* Satellite Policy Branch Information: Satellite Application Accepted for Filing in the 18.8-19.3/28.6-29.1 and 19.7-20.2/29.5-30 GHz Bands; Cut-off Established for Addotional Applications in the 18.8-19.3 and 28.6-29.1 GHz Bands; *Public Notice*, Report No. SPB-105 (Int'l Bur., Sat. and Rad. Div, released Oct. 15, 1997).

develop a consensus orbital assignment plan in December 1998. The applicants submitted two separate plans in August 2000 about a year and a half later, and a revised "majority plan" in November 2000.[94] The Bureau issued licenses in August 2001.[95]

69. Thus, while the negotiation among applicants in processing rounds is not the only source of licensing delay, it can be a significant source of delay. The first-come, first-served option discussed above is one possible means of eliminating negotiation delays, by avoiding the need for processing rounds. Another option is to revise the processing round procedure so that the delay caused by negotiations is eliminated or minimized. Accordingly, below, we invite comment on revisions to the processing round procedure to facilitate or expedite processing round negotiations. Alternatively, we seek comment on revisions that eliminate the need for such negotiations.

2. Facilitating Processing Round Negotiations

70. We invite comment on a number of means to facilitate negotiations in the context of processing rounds. First, we invite comment on allowing some amount of time, such as 60 days after the record closes on applications filed on the cut-off date, for the parties to negotiate a plan to accommodate all the applicants. If the parties could not reach an agreement by that time, we would determine which applications should be given preference over others based on specific criteria. The Commission's rules already place a limit on the number of orbital locations at which each licensee is allowed to operate satellites.[96] We seek comment on additional criteria in this section below. In particular, we seek comment on whether to adopt all these criteria or only certain select criteria. We also invite comment on whether we should place more weight on some of these criteria relative to others.

71. First, we invite comment on favoring new entrants over existing licensees, or licensees currently operating fewer satellites over licensees currently operating more satellites. Both of these proposals would arguably result in facilitating new entry into the satellite market, which may benefit satellite service customers by helping to promote a greater choice of service provider.

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[94] *See* Letter from James U.Troup, Counsel for CAI Data Systems, *et.al*, to Magalie Roman Salas, Secretary, Federal Communications Commission (dated Aug. 11, 2000) (Majority Plan); Letter from James U. Troup, Counsel for CAI Data Systems, *et al*, to Magalie Roman Salas, Secretary, Federal Communications Commission (dated Aug. 11, 2000) (Minority Plan); Letter from James U. Troup, Counsel for CAI Data Systems, *et, al*, to Magalie Roman Salas, Secretary, Federal Communications Commission (dated Nov. 1, 2000) (Revised Majority Plan).

[95] *Second Round Ka-band Orbital Assignment Order*, 16 FCC Rcd 14389. *See also, e.g.*, GE American Communications, Inc., Application for Modification of Authorization to Construct, Launch and Operate a Ka-Band Satellite Service in the Fixed Satellite Service, *Memorandum Opinion and Order*, 16 FCC Rcd 14306 (Int'l Bur. 2001); Pacific Century Group, Inc., Letter of Intent as a Foreign Satellite Operator to Provide Fixed Satellite Services in the Ka-band to the United States, *Order*, 16 FCC Rcd 14356 (Int'l Bur. 2001); PanAmSat Corporation, Application for Authority to Construct, Launch, and Operate a Ka-Band Satellite System in the Fixed-Satellite Service, *Order and Authorization*, 16 FCC Rcd 14367 (Int'l Bur. 2001).

[96] 47 C.F.R. §§ 25.140(e), (f).

72. Another possibility is to give a preference to satellite operators who have not missed a milestone in the past five years. Below, we seek comment on several proposals to strengthen our milestone requirements and to streamline their enforcement.[97] As explained further below, strengthening milestone requirements is important because it encourages licensees to complete construction of their satellite systems in a timely manner. Also, in cases where the licensee is unwilling or unable to proceed with construction, launch, and operation, milestone requirements facilitate reassignment of the license. Granting a preference to applicants who have not missed any milestones would further encourage compliance with those milestones, in addition to facilitating completion of processing rounds.

73. We also seek comment on giving a preference to applicants who have made more progress toward providing service. The Commission's rules permit applicants to proceed with construction of their satellite systems at their own risk.[98] Thus, applicants may begin construction of their satellites before they apply for a license with the Commission. Encouraging applicants to begin construction as soon as possible would help expedite service to the public.

74. Another possible selection criteria is to consider an applicant's commitment to provide service to rural or unserved areas. In addition to providing an additional means to resolve mutually exclusive cases in processing rounds, this approach could provide an additional incentive for applicants to provide service to unserved areas.

75. Finally, we solicit comment on giving a preference in a processing round to the applicants that file earlier than competing applicants. In other words, if an applicant submits its application two days before the cut-off date, and another applicant files a mutually exclusive application on the cut-off date, we would give a preference to the applicant who filed first. This should be an easily administered, bright line rule.

76. In summary, we invite comment on establishing a 60-day deadline for negotiations of a mutually agreeable solution in a processing round. Parties advocating a longer or shorter period should explain their reason with particularity. We also seek comment on all the proposals above for selecting among applicants in the event that they do not reach an agreement within the period. We could adopt all of these criteria, or only certain ones. We invite comment on the weight to be placed on each of the criteria we adopt.

77. In addition to the above, we seek comment whether the pleading cycle for petitions to deny, oppositions, and replies to a lead application should run concurrently with the pleading cycle for competing applications. In other words, after mutually exclusive applications are filed in response to a cut-off date announcement, petitions to deny, oppositions, and replies would be filed in response to all applications, including the lead application, under the same pleading cycle.

3. Mandatory Sharing Mechanism

78. As an alternative to the processing round selection criteria we discuss in Section III.C.2. above, we seek comment on a mandatory sharing mechanism based on the method we used in the *2 GHz* proceeding[99] as a means for selecting among mutually exclusive satellite

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97 Section V.B.

98 47 C.F.R. § 25.113(b); *1996 Streamlining Order*, 11 FCC Rcd at 21583-85 (paras. 6-9).

99 *2 GHz Order*, 15 FCC Rcd at 16138 (para. 16).

applications in a processing round approach. Under this approach, once we receive a lead application, we would issue a public notice establishing a cut-off date for additional applications to be considered together with the lead application. After the cut-off date has passed, we would dismiss any applications that are not "acceptable for filing."[100] After we have placed the remaining applications on public notice, and reviewed any petitions to deny, oppositions, and replies, we would deny any applications that do not demonstrate that the applicant is qualified to operate a satellite system under the Commission's rules. If spectrum sufficient to accommodate the remaining applicants is not available, we would divide the available spectrum equally among the applicants. As another alternative, we could allow some amount of time, such as 60 days after the record closes on the applications filed before the cut-off date, for the parties to negotiate a plan to accommodate all the applicants. If the parties could not reach an agreement by that time, we would divide the available spectrum equally among the applicants.

4. Fungibility Policy

79. The Commission has historically maintained a policy of treating orbital locations as fungible in the context of processing rounds as one means of resolving mutually exclusive situations in the context of processing rounds.[101] The fungibility policy is applied where it is not possible to assign to each participant in a processing round the exact orbital location that is requested. In those situations, rather than simply deny that application, some other location is assigned to that applicant.

80. In addition to the proposals we set forth above to expedite negotiations, we propose streamlining processing rounds by eliminating the fungibility policy. Working to find a way to accommodate each applicant as much as possible can substantially increase the time needed to complete a processing round. This has become more complicated in recent years because of the current three-year backlog in publishing ITU submissions. As a result of the ITU backlog, it is difficult to determine whether we are assigning an applicant to an orbit location that has been encumbered by an ITU filing from another country. It is also difficult to determine whether we would be able to coordinate the proposed satellite system at the newly assigned orbit location with other countries. Eliminating the fungibility policy would eliminate the need to make these determinations. Thus, by relying on applicants to take responsibility for requesting orbit locations that are not encumbered by another country's ITU submission, we can complete processing rounds more quickly.

81. We note that eliminating the fungibility policy might raise issues in cases where two or more applicants in a processing round ask for the same orbital location, because we would no

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[100] In other words, we would dismiss applications that do not meet all the applicable information requirements.

[101] For example, in the *1980 Assignment Order*, the Commission explained that it retained authority to make and change orbital assignments, and noted that the location requested by an applicant is not dispositive of the location to which it will be assigned. Assignment of Orbital Locations to Space Stations in the Domestic Fixed Satellite Service, *Memorandum Opinion and Order*, 84 FCC 2d 584, 601 (para. 45) (1981) (*1980 Assignment Order*). Later, in the *Separate Systems Order*, the Commission concluded that it should also retain this flexibility with respect to international separate systems. It also noted that, even though some satellite operators may consider some portions of the arc more desirable or essential than others, this does not affect the fungibility policy. *Separate Systems Order*, 101 FCC Rcd at 1176 n.168.

longer assign one of the applicants to another location. We have a number of options for addressing that issue. We could select one of the applicants based on the criteria we proposed in Section III.C.2. above. We could split the spectrum among the applicants. We could also designate this issue for hearing. We solicit comment on all these options.

5. Summary

82. As an alternative to the first-come, first-served option discussed in Section III.B., we propose modifications to streamline and expedite the current processing round procedure. We propose placing a time limit on negotiations. Furthermore, we seek comment on two alternatives to facilitate issuing licenses in cases where negotiations fail: (1) establishing criteria for selecting among applicants in a processing round; and (2) dividing the available spectrum equally among all the qualified applicants in the processing round. We also seek comment on streamlining processing rounds by eliminating the fungibility policy and combining comment periods.

83. We invite parties to provide other proposals for revising the Commission's processing round procedures. Parties may identify parts of the processing round procedure that could be streamlined or eliminated, without affecting the Commission's ability to protect current licensees from receiving harmful interference.

IV. TECHNICAL INFORMATION REQUIREMENTS

A. Background

84. It is possible that our review of satellite applications under either option discussed in Section III would be expedited if we adopted a more detailed and standardized application form. Accordingly, we seek comment on expanding our satellite license information requirements. Our current rules and policies already require space station applications to include all the information set forth in Section 25.114.[102] Furthermore, as the International Bureau (Bureau) emphasized in its *1998 Streamlining Public Notice*, we continue to expect satellite applications to be substantially complete when they are filed.[103] In other words, the applications must be complete in substance, and must provide all the information required in the application form.[104]

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[102] 47 C.F.R. § 25.114.

[103] International Bureau to Streamline Satellite and Earth Station Processing, *Public Notice*, Report No. SPB-140 (released Oct. 28, 1998) (*1998 Streamlining Public Notice*). This public notice is also available though Westlaw at 1998 WL 747982 (F.C.C.). Specifically, the Bureau ended its practice of reviewing routine earth station applications in detail to evaluate the accuracy or merits of specific information in an application prior to placing it on public notice. Rather, the Bureau now reviews applications to determine whether they are "acceptable for filing," or simply whether they include all the information required by the Commission's rules. The more detailed technical review is conducted after the Bureau finds that the application is acceptable for filing and has placed it on public notice. In the past, before we adopted this policy of returning deficient applications, an application would sometimes lack necessary technical information. This fact was communicated to the applicant and an opportunity was provided for one or more perfecting amendments to be filed. Thus, although we have taken steps in the past to improve our current procedures, they are still very time-consuming.

[104] In *Salzer v. FCC*, the Court overturned the Commission's adoption of the more stringent "complete and sufficient" standard it had adopted for reviewing low-power television applications. The Court held that the Commission has authority to adopt this standard of review, but that the Commission was not sufficiently clear in its explanation of its information requirements. Salzer v. FCC, 778 F.2d 869

Applications that are not substantially complete will not be deemed "acceptable for filing," and so will be returned to the applicant rather than placed on public notice.

85. In addition, in the *Part 25 Earth Station Streamlining NPRM*, we proposed adding Schedule S to our satellite application filing form, FCC Form 312.[105] Schedule S was designed to collect technical data for space station applications in a standardized format. We stated that developing a standardized format for space station technical data might facilitate developing a database for information on space station licenses and applications, such as frequency bands.[106] We also indicated that such a database might enable us to respond to queries from the public more quickly.[107] We did not propose standardizing all space station information requirements because we tentatively concluded that applicants should be allowed the flexibility to provide some information required by Section 25.114 in narrative form.[108] Finally, we proposed revising Section 25.114 to make it consistent with Schedule S.[109]

86. Below, we review the record we have developed regarding Schedule S, and we conclude that we include Schedule S as part of FCC Form 312 to collect some satellite application information in a standardized format.[110] We defer adoption of Schedule S, however, so that we can consider proposals for new and revised information requirements in light of the other licensing process proposals herein.

B. Schedule S

87. Loral Space & Communications Ltd. (Loral) supports adding Schedule S to FCC Form 312.[111] The Satellite Industry Association (SIA) supports Schedule S, but wants space station applicants to have the option of filing more detailed information in the narrative portions of their applications.[112]

88. We conclude that we will include a Schedule S in the satellite license application form. This should facilitate the development of a database that should enable us to respond to

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(D.C. Cir., 1985). We emphasize that we are not proposing any changes to the "substantially complete" standard we currently use for satellite license review.

[105] 2000 Biennial Regulatory Review -- Streamlining and Other Revisions of Part 25 of the Commission's Rules Governing the Licensing of, and Spectrum Usage by, Satellite Network Earth Stations and Space Stations, *Notice of Proposed Rulemaking*, IB Docket No. 00-248, 15 FCC Rcd 25128, 25191-25201 (App. C) (2000) (*Part 25 Earth Station Streamlining NPRM*).

[106] *Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25152 (paras. 72-73).

[107] *Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25152 (para. 74).

[108] *Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25152 (para. 74).

[109] *Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25152 (para. 74).

[110] For a list of commenters in the *Part 25 Earth Station Streamlining* proceeding, see Appendix A.

[111] Loral Comments at 12.

[112] SIA Reply at 18-19.

queries from the public more quickly.[113] It should also make it easier to monitor trends developing in the satellite industry. We will also revise Section 25.114 to be consistent with Schedule S.[114] Finally, consistent with SIA's recommendation, we will continue to require space station license applicants to file certain information in narrative form, and permit applicants to file additional information in the narrative portions of their applications.[115] We defer the effectiveness of Schedule S and revisions to Section 25.114, however, so that we can consider the proposals below to revise and expand the information requirements of space station license applicants.

C. Revised and New Information Requirements

89. First, as noted above, we did not propose standardizing all space station information requirements because we tentatively concluded that applicants should be allowed the flexibility to provide some information required by Section 25.114 in narrative form.[116] As part of our proposed hard look approach, we invite comment on expanding Schedule S to standardize more of the Section 25.114 information requirements than we contemplated in the *Part 25 Earth Station Streamlining NPRM*. For example, we propose a more detailed collection of the NGSO system information required currently in Section 25.114(c)(6)(ii). In addition, we invite comment on eliminating the separate information requirements for non-voice NGSO MSS applications in Section 25.142(a)(1), so that all NGSO applications will be subject to the same information requirements as set forth in Section 25.114. We also propose using Schedule S to collect more detailed data on digital and analog emission modulation characteristics, currently required by Section 25.114(c)(8). In addition, we propose including in Schedule S data on tracking, telemetry and control (TT&C) facilities and the physical characteristics of spacecraft, now required by Sections 25.114(c)(11) and (12), respectively. Our proposed Schedule S as revised is set forth in Appendix C of this NPRM.

90. In addition, we propose expanding our information requirements. For example, we currently require space station applicants to submit antenna gain contour diagrams, but we do not specify any particular format in our rules.[117] We propose requiring space station applicants to provide the antenna gain pattern contour diagrams in the .gxt format required in submissions to the ITU. Requiring the .gxt format would ensure that applicants have taken at least one preliminary step towards preparing a necessary ITU submission. More importantly, the .gxt format would enable the Commission to extract data from antenna gain contour diagrams and conduct analyses. This would be very helpful in determining whether the proposed satellite would comply with the Commission's technical rules.

91. We further propose collecting more precise data on power flux density (PFD). Section 25.208 establishes PFD limits in several frequency bands, and in general, the PFD limits for angles of arrival between 5° and 25° above the horizontal plane is a function of the angle of

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113 *Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25152 (paras. 72-74).

114 *Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25152 (para. 75).

115 *Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25152 (para. 74).

116 *Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25152 (para. 74).

117 47 C.F.R. §§ 25.114(c)(7).

arrival.[118] We currently require PFD calculations in space station applications, but not in any particular format.[119] Requiring more detailed PFD information in applications might help discourage some applicants from filing frivolous applications, and it would definitely enable us to expedite our review of space station applications. Therefore, we invite comment on requiring space station applicants to specify PFD values at angles of arrival equal to 5, 10, 15, 20 and 25 degrees.

92. Finally, we propose expanding Schedule S so that space station license applicants can provide information on polarization isolation, polarization switching, and alignment of polarization vectors relative to the equatorial plane. This information is necessary to determine whether the space station will meet requirements currently in Section 25.210 of our rules.[120] We also propose mandating that applicants certify that they will comply with the service area requirements of Sections 25.143, 25.145, and 25.208,[121] and the out-of-band emission requirements of Section 25.202.[122]

93. We propose requiring all satellite applicants to complete FCC Form 312, including the more detailed version of Schedule S proposed in this *Notice*, and to provide information in accordance with Section 25.114. By requiring more detailed and standardized information in satellite applications, we intend to facilitate our review of applications, thereby identifying defective applications more quickly. We also intend to require this information of applicants filing in cases in which there is no international or domestic frequency allocation for their planned services. We recognize that some of the information that is required by Section 25.114 might not be applicable to proposed satellites that are intended to operate in frequency bands not allocated to the proposed service at the time the application is filed. Nevertheless, unless applicants are required to provide all this information, it may be too easy for them to file frivolous or "sham" applications.[123] When we adopt service rules for satellites in a new frequency band, we will revise Section 25.114 if necessary to include information requirements relevant for that band, and give applicants an opportunity to amend their applications to provide the needed information.

94. We currently require applicants to pay all filing fees before we will consider their applications. In addition, if the applicant pays by check, we do not consider those fees paid unless the check clears within 13 days of the date the application is filed. We plan to keep these requirements regardless of whether we modify processing rounds or adopt some first-come, first-served procedure. However, in the event that we adopt the first-come, first-served option, for

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118 *See* 47 C.F.R. §§ 25.208(a), (b), (c)(2), (d)(2), (f).

119 47 C.F.R. §§ 25.114(c)(10).

120 47 C.F.R. §§ 25.210(a), (i).

121 47 C.F.R. §§ 25.143(b)(ii), 25.143(b)(iii), 25.145(c)(1), 25.145(c)(2), 25.208.

122 47 C.F.R. §§ 25.202(f).

123 Deterring frivolous applications is important regardless of whether we adopt a first-come, first-served procedure or modify the current procedure. However, we note that these information requirements are comparable to the "hard look" policy the Commission included as part of its broadcast license first-come, first-served approach. At that time, the Commission adopted its hard look policy specifically to deter frivolous or sham applications. *TV and FM Broadcast Order*, 50 Fed. Reg. at 19939-40 (paras. 19-24).

purposes of considering priority of applications, we propose looking to the date and time the application was filed, as explained above, rather than the date the applicant's check clears. If the check does not clear, we would not give the applicant a chance to send a new check, but instead would return the application and consider the next application in the queue.

D. Full Frequency Reuse

95. Part 25 includes several "2° spacing" requirements for geostationary satellite orbit satellites. The Commission instituted its 2° orbital spacing policy in 1983 to maximize the number of satellites in orbit.[124] Under the 2° spacing framework, the Commission assigns adjacent in-orbit co-frequency satellites to orbit locations 2° apart in longitude.[125] FCC Form 312 requests most, but not all, the information that is required to demonstrate that the proposed satellite will meet all the applicable 2° spacing requirements. Accordingly, we propose expanding Schedule S to collect all the information needed to determine compliance with 2° spacing requirements.

96. Included in the Commission's 2° spacing policy are the full frequency reuse requirements. For example, a space station operating in the conventional C-band[126] is required to have a capacity equivalent to that provided by a space station having transponders that use 864 MHz of a 1000 MHz (with two-times frequency reuse) assignment and provide a total power of 192 watts.[127] Essentially, full frequency reuse doubles the capacity of a space station. Thus, our full frequency reuse requirements are important for ensuring that scarce orbit and spectrum resources are used efficiently.[128]

97. Our full frequency reuse policy for the conventional C-band and Ku-band is codified in Sections 25.210(e), (f), and (g) of our rules.[129] In conjunction with the information requirements we propose above, we take this opportunity to propose clarifications to these rules. First, we propose clarifying that these requirements apply to the conventional C-band and Ku-band. Second, we propose revising Section 25.210(f) based on the language we used for Ka-band

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[124] Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions of Part 25 of the Rules and Regulations, *Report and Order*, CC Docket No. 81-704, FCC 83-184, 54 Rad. Reg. 2d 577 (released Aug. 16, 1983); *reprinted at* Licensing Space Stations in the Domestic Fixed-Satellite Service, 48 F.R. 40233 (Sept. 6, 1983) (*Two Degree Spacing Order*).

[125] *See Part 25 Earth Station Streamlining NPRM*, 15 FCC Rcd at 25132 (para. 7).

[126] The conventional C-band is the 3700-4200 MHz and 5925-6425 MHz bands.

[127] *Two-Degree Spacing Order*, 54 RR 2d at 598 n. 67. *See also* Establishment of Satellite Systems Providing International Communications, *Report and Order*, CC Docket No. 84-1299, 101 FCC 2d 1046, 1168-69 (para. 248) (1985) (*Separate Systems Order*).

[128] Systematics General Corporation, *Memorandum Opinion and Order*, 103 FCC 2d 879, 881-82 (paras. 6-9) (1985). *See also* Columbia Communications Corporation, *Memorandum Opinion, Order, and Authorization*, 7 FCC Rcd 122, 123 (para. 15) (1991); *First Columbia Milestone Order*, 15 FCC Rcd at 15572 (para. 13).

[129] 47 C.F.R. §§ 25.210(e), (f), (g). The conventional Ku-band is the 11.7-12.2 GHz and 14.0-14.5 GHz bands.

full frequency reuse requirements in Section 25.210(d).[130] Specifically, we propose revising Section 25.210(f) to read as follows: "All space stations in the Fixed Satellite Service in the 3700-4200 MHz, 5925-6425 MHz, 11.7-12.2 GHz, and 14.0-14.5 GHz bands shall employ state-of-the-art full frequency reuse either through the use of orthogonal polarizations within the same beam and/or the use of spatially independent beams." We seek comment on whether our proposal effectively takes account of the current state of the art in satellite technology and expected future developments. Finally, we also seek comment on whether we should apply these full frequency reuse requirements to extended C-band and extended Ku-band satellites.

V. OTHER ISSUES

A. Background

98. In addition to the adoption of Schedule S discussed above, there are several other proposals which should make our satellite application process more efficient and thus help speed provision of service to the public, regardless of whether we adopt the first-come, first-served option or modify the current procedure. We invite comment on these proposals below.

B. Financial Qualifications and Milestones

99. We invite parties to discuss whether we should streamline our space station licensing procedure by eliminating the financial qualification requirements. In lieu thereof, we propose to rely on strenuous enforcement of our milestone requirements.

100. The Commission's rules require applicants for most U.S. space station licenses to show that they are technically, legally, and financially qualified to operate a space station.[131] To be "financially qualified," the applicant must show generally that it has the financial resources to construct and launch a satellite, and to operate it for one year.[132] Examination of an applicant's financial qualifications is used as a tool to ensure that the orbit-spectrum resource is not tied up by entities unable to fulfill their plans, and also to discourage the filing of speculative applications. Further, determination of an applicant's financial ability is made to ensure that service is promptly made available to users.[133]

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130 47 C.F.R. §§ 25.210(d). The term "Ka-band" generally refers to the space-to-earth (downlink) frequencies at 17.7-20.2 GHz and the corresponding earth-to-space (uplink) frequencies at 27.5-30.0 GHz.

131 *See, e.g.*, 47 C.F.R. § 25.140(b).

132 *See* 47 C.F.R. § 25.114(c)(13) and rules cited therein.

133 *See* Amendment to the Commission's Rules to Allocate Spectrum for, and to Establish Other Rules and Policies Pertaining to, a Radiodetermination Satellite Service, *Second Report and Order*, Gen. Docket No. 84-689, 104 FCC 2d 650, 663 (para. 23) (1986) (*RDSS Second Report and Order*). *See also* Establishment of Satellite Systems Providing International Communications, *Report and Order*, CC Docket No. 84-1299, 101 FCC 2d 1046, 1164 (para. 233) (1985); Amendment of Parts 2, 22, and 25 of the Commission's Rules to Allocate Spectrum for and to Establish Other Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Service for the Provision of Various Common Carrier Services, *Memorandum Opinion and Order*, GEN Docket No. 84-1234, 4 FCC Rcd 6029, 6032-33 (para. 29) (1989); Norris Satellite Communications, Inc., *Order and Authorization*, 7 FCC Rcd 4289, 4291 (para. 11) (1992).